

Kentucky Teacher

October 1998

CTB/McGraw-Hill becomes CATS vendor

By Faun S. Fishback
and Lisa York Gross
Kentucky Department of Education

The Kentucky Board of Education has selected CTB/McGraw-Hill to develop and administer the Commonwealth Accountability Testing System (CATS). The board determined that the California-based firm was the best-equipped of four competing vendors to handle the new testing system developed with direct involvement by thousands of Kentuckians — employers, parents, educators and legislators — and national testing experts.

"This decision truly represents a consensus," said board chair Helen Mountjoy of Daviess County.

One of the nation's oldest, largest and most reputable testing companies, CTB/McGraw-Hill is the nation's largest publisher of tests and instructional management programs for elementary and secondary schools.

"CTB/McGraw-Hill has the expertise to develop a test that is reliable, valid and credible," said Education Commissioner Wilmer Cody, "and it has the experience and resources to manage a testing system that will be outstanding in all respects: printing, scoring, data processing and producing reports that schools and parents can easily understand."

The company will provide nationally administered norm-referenced tests in basic skills (reading, mathematics and language arts) that will permit comparisons of achievement by Kentucky students with that of students nationwide. Following a blueprint developed by Kentucky teachers, the company will also provide tests for more comprehensive measurements of core content mastery, problem solving and critical-thinking skills in reading, writing, mathematics, science,



NUMBER PLAY — Teacher Elizabeth Todd Brown helps Stan Greenwell with a mathematics activity at Wheeler Elementary in Jefferson County. See Page 9 for Brown's tips for making mathematics meaningful to students.

social studies, practical living/vocational studies, and arts and humanities. These tests will be closely aligned with Kentucky's "Core Content for Assessment," the specific knowledge and skills Kentuckians expect students to learn.

CATS tests will be administered as follows:

- The nationally norm-referenced CTBS/5 will test basic skills in reading/language arts and mathematics in the final year of primary and grades 6 and 9.
- Comprehensive tests of core content knowledge, problem solving and critical-thinking skills will cover reading, writing and science for grades 4 and 7.
- Similar tests will cover mathematics, social studies, arts and humanities, and practical living/vocational studies for grades 5 and 8.

The tests for reading and science (grades 4 and 7) and mathematics and social studies (grades 5 and 8) each

will consist of 24 multiple-choice questions and six open-response questions. The arts and humanities and practical living/vocational studies tests (grades 5 and 8) will each consist of eight multiple-choice questions and two open-response questions. The writing test will give 4th- and 7th-grade students a choice between two prompts from which to develop a writing sample. Writing portfolios are required by law in grades 4 and 7, but the state board has not determined whether portfolio scores will be part of the school accountability formula.

- Similar tests will be furnished for high school students. At press time, the state board had not determined which high school grades will be tested or when. The board was scheduled to make those decisions on or before Oct. 7.

CATS tests will be administered for the first time in primary/elementary and middle-level grades during a two-week testing window beginning

April 19, 1999.

Over the next several months, the School Curriculum, Assessment and Accountability Council, a 17-member group appointed by Gov. Paul Patton to help design elements of CATS, and the National Technical Advisory Panel, composed of six national experts appointed by the Legislative Research Commission, will look at additional testing and accountability issues. These groups will make recommendations to the state Board of Education on the following topics:

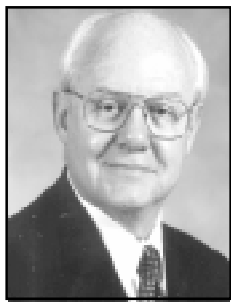
- a fair accountability model that includes student, school and district accountability; rewards for successful schools; and, for schools needing assistance, scholastic audits, assistance from highly skilled educators and distribution of Commonwealth School Improvement Funds

- a School Report Card to give every parent and taxpayer in Kentucky an annual, user-friendly status report on the performance of their local schools

- validation studies to determine the degree to which the test measures what it is supposed to measure.

The state board did not accept any proposals for a work skills test and voted to collaborate with higher education and business partners to develop a way to measure students' work skills proficiency, probably to be administered in grade 10.

The board's selection of CTB/McGraw-Hill is a major milestone in an open and inclusive process that began last spring when the Kentucky General Assembly enacted House Bill 53, which called for significant changes in the state's student assessment and school accountability system. The state Finance and Administration Cabinet will now execute a contract with the testing company.



Commissioner's Comments

By Wilmer S. Cody, Commissioner of Education

Collaboration produces improved testing system

This time, we've done it right. Kentucky has developed a testing system that responds to the dreams, wishes and concerns of many teachers, school administrators, students, parents, legislators and testing experts — and even some of the strongest critics of our previous testing system. The new Commonwealth Accountability Testing System, already better known as CATS, improves on what worked in the previous testing system and changes those things that did not.

A comparison of CATS and the previous system spotlights dramatic differences in the former and the new — differences that respond to problems, complaints and uncertainties expressed by people who want the best for Kentucky students.

- **The process was collaborative.** The CATS development process has involved an unprecedented number of people at every step. More than 3,000 teachers responded to invitations to submit ideas about testing. Their voices influenced the formal recommendations made by teachers (223 of them), school administrators, parents, legislators, nationally recognized testing experts, business leaders, representatives of

higher education, Kentucky Board of Education members and others directly involved in developing plans for the new tests.

- **The test will be a more valid and reliable measure of school and student performance.** Multiple-choice items focused on the core content will count, increasing the number of items on which a student's score is based and increasing the assessment's reliability and validity at the individual student level. That means schools can use the data more confidently for academic decisions about student learning. A separate, norm-referenced test in the final year of primary and grades 6 and 9 will allow for national comparisons.

- **Testing will take less time.** Tests will be designed so that 90 percent of the students can complete a content-area test in no more than two and a half hours. The testing window will be shortened from three weeks to two, causing less disruption in the instructional process.

- **Results will be reported sooner.** Schools will receive scores by Sept. 15, much earlier than before. This makes test scores a much more valuable tool to teachers as they plan what and how to teach.

- **Results can be used to measure longitudinal progress.** The testing contractor, CTB/McGraw-Hill, will develop and pilot a longitudinal model for measuring the progress of individual students over time.

Six equal forms of the test will be developed in the first year, giving the test more content validity. As a result, CATS will provide a more accurate picture of each school's success in covering the core content and a better measure of each student's knowledge of content in each subject. Having six forms of the test makes it possible to release an entire form of the test each year instead of just certain items. A complete test is much more effective than isolated items as a professional development tool for teachers. It also gives parents and the general public a much clearer picture of what is tested.

Test reliability and validity studies will be tools for continuous monitoring of this system. An improved equating system will confirm technical quality for year-to-year comparisons of school performance.

- **The contractor has vast resources and a proven track record.** CTB/McGraw-Hill is familiar to teachers as an internationally known and reputable test developer and contractor. Even so, Kentucky's contract with this respected company specifies several quality control measures designed to prevent the kinds of problems that have occurred in the past.

Each of these improvements is significant. Each is a direct response to what many — especially teachers — told us was a problem under the former system. Can there be a perfect testing system, one applauded by everyone? Probably not. This new system, though, promises to do what we want it to do. It will measure our progress toward the rigorous academic standards outlined in Kentucky's "Core Content for Assessment"; it will compare our students' achievements with that of students throughout the nation; and it will provide timely data in a format schools can use to improve instruction.

That's a lot to ask of any testing system, but we will accept no less.

Kentucky Teacher FORUM

Each month, *Kentucky Teacher* presents a topic and invites teachers' responses. This month's topic:

All children can learn, and nearly all can learn at high levels.

- In 1989, the Task Force on Education Reform adopted that statement.
- In 1997, the Task Force on Public Education's Assessment and Accountability Issues Group affirmed the statement.
- Recent surveys indicate that an increasing number of teachers agree with the statement.

The questions:

1. Why do you believe — or not believe — the statement?
2. What are the statement's implications for schools? For teachers?

To respond . . .

- e-mail to kyteach@kde.state.ky.us
- mail to *Kentucky Teacher*, 1914 Capital Plaza Tower, 500 Mero St., Frankfort, KY 40601
- fax to *Kentucky Teacher* at (502) 564-6470

Please include your name, school, grade level, phone number and best time to call. *Kentucky Teacher* will verify all comments before considering them for publication.

Join the dialogue. Your opinions count!

Three cheers for four teachers!

Kentucky applauds new Milken winners

Amid the cheers of primary students, the smiles of colleagues and congratulations from administrators, four Kentucky educators recently were recognized by the Milken Family Foundation as among the best in the nation. Education Commissioner Wilmer Cody traveled the state on Sept. 15 and 16 to make surprise presentations to each of them.

The four winners of the foundation's National Education Awards were chosen from a list of outstanding educators submitted by the Kentucky Department of Education to an independent committee for evaluation. Criteria included outstanding ability to instill in students character and self-confidence; distinguished achievement in developing innovative curricula, programs and teaching methods; and commitment to professional development.

Each winner will receive a



Photo by Lisa York Gross

Cathy Crum Bell reacts to Education Commissioner Wilmer S. Cody's surprise announcement that she is one of four winners in the Milken Family Foundation's National Educator Awards Program for 1998. Bell, a career educator, is the principal of Veterans Park Elementary in Fayette County.

\$25,000 cash award and an all-expenses-paid trip to Los Angeles in June 1999 for a conference with Milken win-

ners from other states.

Other benefits include public recognition at various state and national

events; participation in continuing projects using Internet-based software, including exclusive membership in a "virtual workspace" on the Internet; membership in state and national networks of more than 1,100 Milken educators; professional development opportunities at state and national conferences; and Internet access provided by MCI Communications Corp.

With the announcement of this year's winners, Kentucky has celebrated a total of 28 Milken awards since 1993.

For more information about Kentucky's participation in the Milken Family Foundation's National Educator Awards Program, phone Donna Melton at the Department of Education at (502) 564-3421 or send an e-mail message to dmelton@kde.state.ky.us. General information about the Milken organization is posted on the Web at www.mff.org.



Gwen Ferguson

Primary teacher
with 10 years
of experience

Hattie C. Warner Elementary,
Jessamine County



Cathy Crum Bell

Principal with 22 years
in education, including
eight years in administration

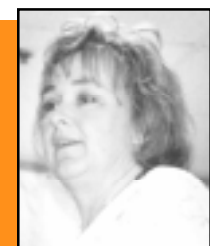
Veterans Park Elementary,
Fayette County



Freda McNew

Primary teacher
with eight years
of experience

Salyersville Grade School,
Magoffin County



Mary Ann Payton

4th-grade teacher
with 16 years
of experience

Central City Elementary,
Muhlenberg County



Rival schools collaborate to improve water quality

The beautiful mountain views of Southeast Kentucky hide an underlying tragedy. The tragedy occurs along roads, valleys and rivers that cut their way through the mountain slopes. The view traveling up the mountain to the Crane's Creek branch of Martin's Fork Lake in Harlan County affords the simple, elegant beauty of the mountains marred by gaping, hillside ledges made by logging companies. Few federal, state or local initiatives deal with the hard-to-see and difficult-to-remediate chemical pollution from abandoned mines. Red water streams along in ruts at the side of the road and collects in pools where the shoulder would normally have been. The mountains are bleeding.

By Sharon Crouch Farmer
Kentucky Department of Education

Leslie Spurlock of Harlan County's James A. Cawood High School and Johnny Phillips of Harlan Independent's Harlan High School had cheered for rival basketball teams in January. But from March through May, the two were among 22 students — 11 from each school — paired from advanced chemistry classes in a joint environmental project. Their charge was the analysis and remediation of water quality.

Rick Brock, a director of the Cumberland Association for Rural Development (C.A.R.E.) and the project's founder, wanted students from the area to realize the impact the private sector can have on the environment. "Kids learn a lot in the classroom, how to run the equipment and so on," Brock explained. "But they really can't connect something until they get out in the field and see how it all comes together."

To provide that field experience to students, he needed partners and funding. Cumberland Valley District Health Department environmental coordinator Donna Roark and the U.S. Army Corps of Engineers joined with C.A.R.E. members Brock and David Howard, Kim Evans of Cawood High School and Clifford Slusher of Harlan High School to write a proposal for a water quality education grant. The group developed eight objectives for the project using a se-

ries of lessons from an activity guide supplied by the Kentucky Environmental Education Council. Hands-on learning activities involved five field trips to the Cranes Creek watershed. Four-wheel drive vehicles and pontoon boats from local citizens provided transportation to the watershed site. Once there, students attended a lecture by an environmental specialist, took water samples and conducted field tests.

The Corps provided safety training and safety equipment for the students, field coordination and oversight.

High schools provided bus transportation for field trips, faculty and classroom support. The local hospital helped provide lunches.

"We considered the educational activity [the testing, analysis and remediation planning done by the students] to be phase one, and phase two will be the actual remediation of the site," Howard explained. "In phase three, we will bring students back out to retest the water and record any changes."

Howard said the data the students collect will be used. "They are

doing exactly what trained scientists would do," he said.

Teachers from both high schools say they are more than pleased with the project. "It followed what these students had been introduced to in the classroom the year before," said Slusher, "and took them to the next level."

"The curriculum crosses through content areas of science, mathematics and language arts, as well as teaching life skills," said Paul Barnes, Cawood physics teacher. "They learn to work with others and about issues they'll be facing in the future."

Slusher added that students also gain experience in the need for patience on a long-term project.

By the date of the last testing exercise in May, the students had a preliminary remediation plan — supported by documentation, charts and graphs of data and research — ready for the Army Corps of Engineers.

"We enjoyed the project," said student Donna Lemaster of Cawood High, "and we got to see what it's really like to do the work instead of just reading about other people doing it. It makes a difference."

Members of C.A.R.E. hope that it will make a difference for years to come, in the lives of the students and the land.

For information on the project, contact Jeff Phillips at the Harlan County Board of Education at (606) 573-4330 or send e-mail to jphillips@harlan.k12.ky.us.



Photo by Sharon Crouch Farmer

Seniors from rival high schools in Harlan County work together to evaluate and improve water quality in the Cranes Creek watershed.

Controlled research on Internet offers learning opportunities for everyone

By Faun S. Fishback
Kentucky Department of Education

Do you have access to a computer? Do you have an Internet connection? Do you have a few hours to spend honing your technology skills?

If so, you can join the ranks of Kentucky teachers who are changing student attitudes about research through WebQuest activities for their classrooms.

WebQuest is a relatively new way of integrating Internet research into the classroom curriculum. Teachers develop a WebQuest task for students and link pertinent Internet research sites for students to access. It is a win-win activity for everyone, say library media specialists Mary Ann Parrott of Middlesboro (Independent) Middle School and Merry K. Stegner of Mason County Middle School.

Students like WebQuest assignments because they get to use a computer for all or part of their research and they get to explore the Internet. They gain research skills and are challenged to use higher-level thinking skills.

WebQuests offer teachers the opportunity for professional development. During WebQuest development, teachers learn more about technology, the Internet and Web page construction.

"The easiest thing for teachers to do at first is pull a WebQuest from the Web and adapt it to their classroom curriculum," said Parrott.

That's what Middlesboro Middle School science teacher Rhonda Roark did. She found a WebQuest about the solar system and adapted it for her 8th-graders' astronomy unit. Her WebQuest is located at 170.183.222.93/FACULTY/Solars~1.htm on the Internet. She spent about six hours adapting the WebQuest, but "I think it will go faster as I develop more WebQuests," she said.

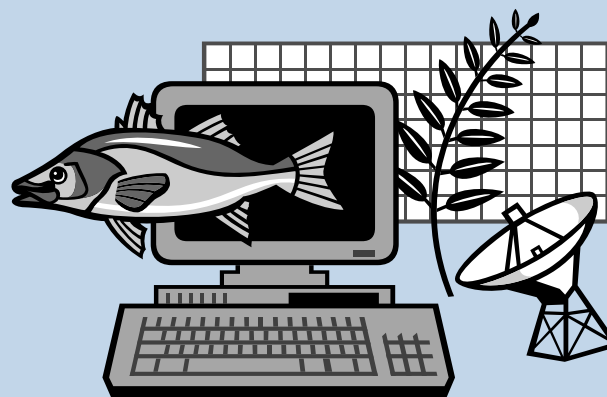
Roark says her students get more excited about doing research when technology is a part of the process. "It's not a mundane research project when they use the Internet for research," she explained. "It's more exciting. It's more interesting. It's something different-ability students can use with success."

The WebQuest is a natural progression from what Roark started several years ago: bookmarking multiple Internet sites, then saving the bookmarks and research instructions on a few disks for student teams. Because everything is posted on the Internet, "the entire class can have access to the WebQuest at one time," Roark said. "If students have a computer at home, they can go to my page on the school Web site and work at home."

"The idea of using the Internet in the classroom is still new," said Stegner, the Mason County Middle library media specialist. "However, the WebQuest addresses the issues of wasting time and about students working at unedited sources because the teacher marks 'good' sites that offer valid, accurate information."

Teachers also must develop an essential question or task for the WebQuest. "There may not be a right or wrong answer," Stegner said. "The emphasis is on how students arrive at their answers. This is something we've been doing with education reform — asking students to use higher-order thinking skills."

Parrott and Stegner are trainers for a WebQuest professional development course sponsored by the Kentucky Department of Education. The course can be taken anytime online (www.kde.state.ky.us/bmss/oet/dcsc/webquest/) or at regional sites this fall. See school technology coordinators for information about session dates and locations.



To learn more about WebQuests, visit some or all of these Internet sites:

Note: As always, precede all Web addresses with <http://>

www.kde.state.ky.us/bmss/oet/dcsc/webquest/ — The Kentucky Department of Education offers the opportunity to develop a WebQuest and earn professional development credit. This site also has links to a rubric for evaluating WebQuests, a matrix of sample WebQuests and "Blue Web'n" sites categorized by grade level, content area and type.

edweb.sdsu.edu/webquest/webquest.html — San Diego State University was the birthplace of the WebQuest in 1995. This site offers a good introduction to WebQuests and examples from around the world.

edweb.sdsu.edu/courses/edtec596/webquestwebquest.html — This is a WebQuest to learn about WebQuests.

www.scott.k12.ky.us/teachnology/teachquest/index.html — This site is a good Kentucky example of how a WebQuest can be used for professional development.

For more information about WebQuests or the fall regional training, contact Mary Ann Parrott at (606) 248-9420 or by e-mail at mparrott@mboro.k12.ky.us; Merry K. Stegner at (606) 564-6748 or by e-mail at mstegner@mason.k12.ky.us; or Jackie White, technology consultant with the Kentucky Department of Education at (502) 564-7168 or by e-mail at jwhite@kde.state.ky.us. All three may also be reached by e-mail through the Exchange global address list.

October is Computer Learning Month.

To learn more about new uses of technology, visit the Computer Learning Foundation's Web site, www.computerlearning.org.

Algebra and geometry

'Weird stuff' helps students visualize higher-level mathematics

By Faun S. Fishback
Kentucky Department of Education

Andrew Willian looked at a battery-operated toy on display at King's Island amusement park and visualized hours of fun twirling the light stick in the dark. Lisa Willian, his mom and a mathematics teacher at Hart County High School, looked at the evenly spaced colored lights in a plastic tube and saw a teaching tool to discuss collinear points as well as midpoints and distances with her geometry students.

She looks at a billiards table and sees a game of angles. Origami animals and paper airplanes aren't just amusements but opportunities to study linear pairs of vertical angles, complementary angles and supplementary angles.

A few weeks into school, she had geometry students measuring angles of joints in their feet, elbows, wrists and legs with goniometers, an instrument used by physical therapists.

"We do lots of this," Willian said. "I call it 'the weird stuff.'"

Weird or not, it draws students into mathematics and helps them make real-world connections with formulas and figures. These activities exemplify Willian's belief that all students can learn algebra and geometry if teachers teach to the multiple ways students learn.

"All children can learn, but not in the same way," Willian said. "Teachers can't teach mathematics only one way. We've got to give students multiple perspectives. We've got to vary how we present the information."

That's why in her Algebra I class, students find themselves as coordinates on large X- and Y-axes painted on the school parking lot. They use algebra tiles to visually understand why $x + x$ does not equal x times x

(x squared). They learn to become good problem solvers by answering brain teasers.

In the classroom, Willian never stands in one place for long. As music plays softly in the background, she scurries from student to student, cautioning them to "think about what you're doing. Look for reasonable answers. ..."

"I let them do the learning," she said. "I don't want to be 'the sage on

the stage.' I'm more 'the guide on the side.' I want them to get in their heads what the problem visually means."

She is especially animated this year, thanks to a fellowship that permitted her to attend a workshop at the University of California at Berkeley.

"The first week was mind-boggling," she said. "The activities really got me into more cooperative learning activities than I have done in the past."

She has instituted several ideas from the workshop. She no longer has desks. Students sit at tables of four. Each chair corresponds to a number, 1-4. When time comes to solve problems at the chalkboard, Willian spins a wheel to find out which group members — the ones, twos, threes or fours — get to solve the problem for the class. Students earn participation points for solving problems and explaining how to solve problems.



Photo by Rick McComb

With the aid of a goniometer, an instrument used by physical therapists to measure flexibility and mobility of joints, Kelly Dudley measures the smallest angle Rebecca Trembula can make by bending her knee during a hands-on activity in Lisa Willian's Algebra I class.

Each table also has a plastic shoe box filled with mathematics materials. The boxes contain algebra tiles, rulers, scissors, string, glue sticks, pencils, markers, patty papers and coloring pencils. Lack of materials can't be an excuse for not participating.

The walls and ceiling of her room are decorated with mathematics information from countries around the world. Student-produced posters compare geometry in architecture with geometry in nature. Hand-made geometric forms dangle from the ceiling.

Lisa Willian offers these suggestions to other teachers:

- Don't be afraid to try something different. "I've never taught geometry exactly the same way twice," she said. "I'm always adding or changing something."

- Attend conferences and meetings with other mathematics teachers. "We can learn so much from each other," she explained.

- Good professional development is out there if you seek it. Beginning in October, KET will air six one-hour presentations from the Kentucky Council of Teachers of Mathematics Showcase on teaching strategies that help make geometry accessible to all students. Willian is one of the presenters in November.

- Don't be afraid to ask for help or ideas from other teachers. Willian has participated in mentoring programs and works collaboratively with other mathematics teachers at her school.

- Look for the geometry lessons posted on the Internet. Willian received the grand prize from Microsoft — a computer and registration for on-line professional development — for her interdisciplinary lesson titled "Discovering Fractals." The lesson is

posted on the Web at www.microsoft.com/education/k12/lesson_detail.asp?id=73.

To contact Willian for details about her teaching strategies, phone her at (502) 524-9341 or send e-mail

to lwillian@hchs.hart.k12.ky.us. For information about KET professional development programs, phone Darlene Carl at (800) 432-0951, extension 7271, or go to KET's Web site at www.ket.org.



Photo by Rick McComb

Hart County mathematics teacher Lisa Willian, right, shows Megan Ladd how to use a goniometer to find the smallest angle made by Lee Branstetter as he bends his elbow and touches his shoulder.

Willian's Christa McAuliffe award will fund Geometry for All network

Lisa Willian's desire to teach all students higher mathematics skills garnered her the designation of Kentucky's Christa McAuliffe Fellow for 1998. She plans to use the award money to develop a network for mathematics teachers, grades 7-12, in Region 2. During the coming year, Willian will bring these teachers together once a month to discuss teaching geometry to all students. A listserv and Web page also will provide communications tools for the teachers.

Willian said she visualizes teachers sharing hands-on activities and other methods to reach all students. The shared information will be compiled on a CD-ROM and given to Region 2 mathematics teachers. She hopes to be able to get at least one hands-on activity using manipulatives, cooperative learning or technology for every geometry learning process listed in Kentucky's program of studies. If additional funding can be found, she said, the CD-ROM could be reproduced for every middle and high school mathematics department in the state.

Kentucky Teacher Profile



Lisa Willian

- Geometry and Algebra I teacher, Hart County High School
- Teaching for 16 years
- Bachelor's and master's degrees and Rank I certification, Western Kentucky University
- Member: Kentucky Council of Teachers of Mathematics, Western Kentucky Council of Teachers of Mathematics, National Council of Teachers of Mathematics, INTASC for Beginning Mathematics Teachers Mentoring Program; associate member, PRISM
- Trainer, Appalachia Education Laboratory's "Algebra for All" workshops, summer 1998
- Member of committees that developed the "Program of Studies for Kentucky Schools Grades Primary-12" and "The Implementation Manual" (1998)
- 1998 Christa McAuliffe Fellow; 1998 state finalist in the Presidential Awards for Excellence in Science and Mathematics Teaching

How to instill the desire to learn mathematics

By Sarah Denise Going
Henry County High School

One of our greatest challenges as teachers of mathematics is to help all students reach their highest level of learning. Some students are very resistant to mathematics due to lack of motivation or fear of failure. We must constantly seek new ways to reach these students, to instill in them the desire to learn. Here are my suggestions:

- Involve students in the learning process, allowing them to make choices about what and how they learn.

- Develop appropriate questions for students simply by talking to them about their interests outside of class. On the first day of class, ask them to write paragraphs about themselves, including hobbies or extracurricular activities. Use this throughout the year to look for applications that might pique their interest in a lesson.

- Prior to any group work in mathematics, spend time on activities that help students learn how to work cooperatively. These activities help students realize that each member is responsible for everyone in the group, and that much more can be accom-

plished when all members work together. (See "Sarah says, 'Try this!'" on this page.)

- Encourage the class to explore problems individually, to work in small groups and to provide peer instruction. The teacher serves as a guide for students as they discover mathematical concepts through participation in activities.

- Students are sometimes motivated to learn mathematics skills if they recognize they need these skills to solve a problem in another discipline. Consequently, it is helpful to plan integrated lessons with teachers of other disciplines. (See "Sarah says, 'Enable students!'" on this page.)

- A desire to participate in problem solving may also be sparked by games based on algebraic equations or patterns — games that are purchased, designed by the teacher or even designed by the student. Most students also enjoy learning concepts through manipulatives and laboratory exercises.

- Most students like to listen to soft music when they are doing quiet work. In support of this, recent studies have shown that background music by

Mozart provides a stimulating environment for learning.

- Celebrate the birthday of a famous mathematician. Discuss some of the concepts the mathematician developed. Serve a birthday cake or other treats.

- It is crucial that every student be convinced that there is a need to learn mathematical concepts and that the concepts can be mastered successfully. Whenever a student claims "I cannot do this," it is important to listen first, then develop a response appropriate for that student. The teacher may need to work individually with the student and may frequently need to offer positive reinforcement. Once a student experiences success, confidence is boosted and studying mathematics is enjoyable — for both the teacher and the student.

For more information about these and other strategies for teaching mathematics, phone Sarah Going at (502) 845-2888.

Kentucky Teacher Profile



Sarah Going

- 23-year veteran of teaching; now at Henry County High School
- Kentucky's secondary-level mathematics recipient, 1997 Presidential Awards for Excellence in Science and Mathematics Teaching
- Past recipient of a \$3,500 SciMath Fellowship
- Resource teacher, Kentucky Teacher Internship Program
- Manuscript reviewer for the National Council of Teachers of Mathematics

Sarah says, "Try this!"

Each group of students chooses a leader to stand inside a circle formed by the other group members. The students are instructed not to talk during the activity. The leader of each group is told to stretch out both arms in front of the body and parallel to the floor with the palms up. The teacher then places a heavy

object on each leader's upturned palm. (This might be a 5-pound sack of flour or several textbooks.) After a couple of minutes, group members will literally see the leader's arms become tired and pull toward the body. Eventually (sometimes with a hint from the teacher), group members offer to help by supporting the leader's elbows or providing

some other assistance. At this point, the teacher reviews the rules for cooperative groups with the class. Do similar exercises daily for about five days until students begin to work together with other members of their group.

Sarah says, "Enable students!"

Recently, students in an English class were reading books whose characters had physical disabilities. These students worked with the social studies class to research the Americans With Disabilities Act, including the legal specifications for school buildings. Our mathematics class used the concepts of slope and force to determine if our building was in compliance. This information was shared with other classes, who then made plans for correcting some of the areas where our building was not in compliance.

How to make mathematics meaningful

By Elizabeth Todd Brown
Wheeler Elementary, Jefferson County

At Wheeler Elementary, we believe that a successful mathematics classroom is filled with active, communicative problem solvers with diverse learning styles. The teacher's role is to engage the students in meaningful problem-solving tasks that present opportunities for them to learn and apply mathematics concepts and skills.

Our schoolwide focus on multiple intelligences demands that different learning styles be acknowledged through more authentic, richer evaluative models; through the use of performance tasks, open-ended questions, portfolio prompts and presentations; and through the use of "mathematician's notebooks" to record activities and self-assessment. Instruction and assessment must be guided by the students' knowledge.

We have found that children's literature provides a powerful context on which to build mathematical tasks successfully for both male and female students. It can transport them to other worlds, places where there are possibilities and options that can be tried on for size.

Three years ago, I became part of a collegial action research project called "Feisty Females" that examined

the link between literature and mathematics. The learning experiences that were developed by the team, which included Karen Karp of the University of Louisville and Linda Allen of Goshen Elementary (Oldham County), demonstrated literature to be a fundamental link for females to connected learning.

Young female mathematicians tend to need encouragement to share their ideas. By 4th grade, they become more reticent in class discussions. Using stories with female characters that modeled problem-solving methods and solution steps, characters became springboards to tasks designed to complement the stories. The prompts required students to test and use different materials, manipulatives and strategies to spotlight their mathematical thinking.

Work groups encouraged students to share ideas using a "What Do I Know?" format in which they determined what they knew and what puzzled them. After formulating a solution, the students identified the patterns they saw and the strategies they used. Talking, sharing ideas and questioning each other about possibilities are all part of the process.

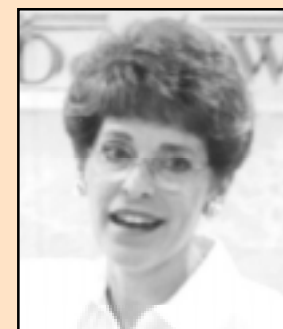
These collaborative, cooperative work groups recognize that students will show what they know and what they can do in different ways. The literature-based activities involve student-to-student and student-to-teacher communication.

The "Feisty Female" action research has been a life-altering event for me, both professionally and personally. The literature was the catalyst for the research, but to use the best practices effectively I had to focus on my instructional practices.

"Women's Ways of Knowing," developed in 1986 by Belenky and others, suggests that establishing links between topics and lives is prerequisite for the most efficient learning of abstractions. Mathematics can be more enriching for all students when it is authentically connected to the real world. This process of integrating mathematics with other content areas and the real world becomes the connected curriculum to which we aspire.

For more information about these and other strategies for teaching mathematics, phone Elizabeth Todd Brown at (502) 485-8349.

Kentucky Teacher Profile



Elizabeth Todd Brown

- 25-year veteran of teaching
- Doctoral candidate at the University of Louisville
- Undergraduate degree from Drake University
- Recipient, 1997 Presidential Awards for Excellence in Science and Mathematics Teaching
- Presenter at regional and national conferences; available to conduct workshops for educators and parents
- Recipient of numerous grants, including a 1996 National Education Association Urban Grant.
- Co-author of "Feisty Females — Inspiring Girls to Think Mathematically" (Brown, Karp and Allen; published by Heinemann, 1997). To order, send a fax to (800) 847-0938; call (800) 794-2154; or visit the Web at www.heinemann.com. Request catalog number 0-325-00009-3. Price: \$22.

Tips for teachers

- Be an "out-of-the-box" thinker; look for multiple ways to present mathematical concepts.
- Network, read publications, attend conferences, start a mathematics support group, join local and national mathematics organizations, share your ideas, expand your repertoire, embrace professional development opportunities.
- Reflect on your teaching practices. Are they meeting all the needs of your young mathematicians?
- Read to your students; let them listen for the problem-solving ideas.

Lunches strengthen links between parents and school

By Sharon Crouch Farmer
Kentucky Department of Education

At Paris Elementary in the Paris Independent school district, teachers and staff succeeded with two out-of-the-box ideas for increasing contact between parents and the school. Both ideas also increased communication between parents and their children. For more information about these and other parent engagement approaches at the school, phone (606) 987-2166. (Mary Salsman, who was the principal at Paris Independent when the school launched these activities, is now principal at Peaks Mill Elementary in Franklin County.)

The 100-Man Lunch

It was inspired by the Million Man March in Washington, D.C. It was the first time many fathers had visited the school during regular hours. It was the first 100-Man Lunch at Paris Elementary (Paris Independent), and it was attended not by 100 but 180 men.

The event, developed by then-Principal Mary Salsman and Parent Involvement Coordinator Liz Yeiser, was, said Salsman, "an effort to build on the interest in education that traditionally engaged mothers."

Using a grant from the Central Kentucky Education Cooperative, the Paris Elementary staff transformed the gym and cafeteria into a cafe for the special meal and hired extra food service help to meet the demand. The school promoted the event in the local newspaper for three months. Students delivered invitations in early March with a follow-up reminder two weeks before the event. The Parent Teacher Organization helped provide some of the extra touches, such as name tags.



Faith Ratliff surprises her dad, Michael, with handmade placemats to use during lunch. Michael Ratliff was among the 180 men who visited the school to have lunch with students.

Guests began arriving at 10:30 a.m. From then until 12:45 p.m., the principal served as the first point of contact for visitors. Fourth-graders served as greeters, escorting guests to the classrooms of their hosts. A team of students in the cafeteria helped with food trays.

Fathers proudly helped children open milk cartons. They talked with their children about basketball and classwork and looked at school banners. The visitors walked out of the gym just a little taller than when they came in.

The Authors Cafe

Mary Salsman was experiencing a dilemma common to many parents — especially single parents: missing a child's school events because of work obligations.

Salsman, then the principal at Paris Elementary, began to brainstorm with the school staff about ways to help those single parents: *Can we give those parents and others an opportunity to be more involved with their children's educational experience? To witness successes in the school atmosphere? What are we good at, and what should be our focus as we develop this opportunity?*

In 1996, Paris Elementary was selected for study by the Appalachian Educational Laboratory because of success in raising writing portfolio scores. In the spring of 1998, representatives from Denmark visited to examine the school's writing program. In view of such success, Salsman wondered if parents would come to school to hear their children reading things they, themselves, had written.

The school designated a room for an Author's Cafe and furnished it

with tables and chairs courtesy of the Parent Teacher Organization. Each week, one teacher invited parents to come to the Author's Cafe, where students were ready to present samples of their writing.

It was a one-on-one time, when each parent could focus on his or her child and establish communication.

Parent Brenda Prince, a frequent visitor to the Author's Cafe, said she thought she knew her son. "My husband works nights, so my sons and I spend a lot of time together," Prince said. "But after a few visits to the cafe, I've learned so much more about my son."

Prince said that her younger son's reading has improved and that he has learned to use his imagination.

Parents are asked to sign in and complete a brief survey after they have spent time in the cafe.

"The responses were very positive," Salsman reports, including such comments as "I want to come back."



James Prince explains a school project to his mother, Brenda, during a visit to the Author's Cafe at Paris Elementary.

Problem solving and conflict resolution

What strategies really work?

By Soleil Gregg
Appalachia Educational Laboratory

House Bill 330, passed into law during the 1998 session of the General Assembly, requires districts and schools to assess school safety and discipline and develop improvement strategies by May 15, 1999. The following article on school safety strategies is excerpted from "School-Based Programs to Promote Safety and Civility," published in "The Link" by Appalachia Educational Laboratory, Spring 1998.

The democratic process depends on the practice of civility to negotiate differences among individuals and groups. However, disputes and insults increasingly trigger violent responses, especially among the young. ... Parents, educators and students increasingly ... complain that students lack civility and respect for teachers and classmates.

Although the causes of violence are complex and varied, our youth clearly need to learn a basic prerequisite for civilized behavior — how to settle differences nonviolently. ... Schools throughout the country are beginning to implement curricula and programs to teach students how to ... express their concerns peacefully ...

Many of these programs appear promising, ... but a lack of scientific evidence proving their effectiveness has left school personnel wondering what programs really work. To better inform schools and communities, the U.S. Departments of Justice and Education, the National Institute of Mental Health, the General Accounting Office and the Centers for Disease Control and Prevention have funded studies of school-based interventions over the past few years. Data from these and other rigorous studies are providing evidence that training students to manage their emotions, to respect others' viewpoints and to settle their differences peacefully can help

reduce school problems of violence and disrespect.

School-based programs to help students manage interpersonal conflict range from simple classroom curricula to comprehensive, schoolwide programs. Most teach a process that helps students change from being adversaries in a face-to-face confrontation to being partners in a side-by-side search for a fair agreement that is advantageous to both. Effective programs teach students how to separate people from the problem, focus on interests instead of positions, develop win-win options and make decisions based on objective criteria. They also present a process for problem solving such as negotiation, mediation or consensus building. Finally, they help individuals develop the attitudes, values and abilities — cognitive, social and emotional — they need to negotiate disputes.

Schools have traditionally expected discipline systems to correct behavior problems. However, punishment may exacerbate rather than eliminate violence and does not teach students to be prosocial. ... Teaching children the three C's — cooperation, civic values and conflict resolution — can provide the structure and skills for creating safe, supportive school environments.

For any program to succeed, school staff need to believe that conflict can be resolved peacefully and to model this belief in classrooms and schools. Adopting a program may require school leaders and staff to shift from traditional behavior management systems, in which discipline is an externally imposed set of rules and consequences, to helping students develop the values, attitudes and inner discipline they need to regulate and control their own behavior.

Key characteristics of effective programs

A study by the General Accounting Office identifies seven key characteristics of effective violence prevention programs:

1. a comprehensive approach that recognizes the complexity of violence
2. an early start and long-term commitment (a K-12 approach)
3. strong school leadership and clear, consistent discipline policies and procedures
4. training for administrators, teachers and staff in behavior management, mediation and violence prevention strategies
5. parent training and involvement
6. links to law enforcement and social service agencies and the community
7. culturally sensitive and developmentally appropriate materials and activities for students.

Steps for implementation

The following implementation steps can increase the chance of program success:

- Assemble a planning team comprised of administrators, teachers, parents and community members. Many schools already have school-based decision making teams that can fulfill this role.
- Determine the types of conflict in the school and ways conflict has been addressed. Support for the program will depend, in part, on how the program addresses perceived needs, builds on school strengths, meshes with existing school improvement plans and promotes the school's educational mission.
- Develop goals and desired outcomes based on assessment of needs.

- Choose a program or curriculum that best matches school needs and goals.

- Select a staff development trainer, preferably one who helps the school build capacity to deliver its own continuing and future staff development.

- Seek administrative, faculty and parental commitment and support. Building and district administrators can provide leadership and support by sharing the program's benefits and successes with local boards of education, faculties, students, parents and civic groups; participating in training and teaching opportunities; and modeling the principles of resolving conflict. They can also involve faculties in planning, ensure adequate staff development, inform parents about the program and even provide parent training in conflict resolution techniques.

- Evaluate results. Evaluation measures progress toward program goals and provides data for continuous improvement. Evidence of success also helps sustain enthusiasm for the program.

To request the entire text of this heavily footnoted research article, phone AEL toll free at (800) 624-9120; fax (304) 347-0487; e-mail aelinfo@ael.org; The complete text is also available on the AEL Web site at www.ael.org/link/171/lnk17100.htm.

Copies of the complete article, plus additional information and assistance on school safety and violence prevention issues, are available from Tom Willis at the Kentucky Department of Education. Phone (502) 564-3930 or e-mail twillis@kde.state.ky.us.

Appalshop cuts video prices for Kentucky P-12 schools

Appalshop Film and Video, a nonprofit media cooperative in eastern Kentucky, has cut the prices of its video productions to make them more accessible as teaching tools in Kentucky P-12 schools. Schools buying at least five videos may get up to five additional videos free.

Appalshop productions cover a wide range of subjects, including traditional mountain crafts, art and artists; dance, drama and music; mountain-region occupations; environmental, global and social issues; folklore and folklife; and AIDS and other health issues. Many of the productions have appeared on KET and other PBS stations and the Learning Channel.

P-12 schools may buy any video in the Appalshop catalog for \$35, a substantial discount from full prices ranging from \$95 to \$350. Some videos have study guides for teachers. A catalog of Appalshop films, audio and video tapes, and CDs is available on the Web at www.appalshop.org.

With support from a grant, Appalshop offers one free video for each video purchased. To qualify, a school must purchase at least five videos at the \$35 discounted rate. Each school may receive up to five free videos, which are available on a first-come, first-served basis as long as the

supply of 80 tapes lasts.

Appalshop marketing and sales director Carolyn Sturgill said that while videos have been in demand for P-12 classroom use, the purchase and rental prices have been too high for most schools' media acquisition budgets. Appalshop's primary buyers have been colleges and universities.

"The lower price will make these videos more accessible as P-12 instructional tools," Sturgill said. "I suggest that educators work as a collective within their schools and districts to combine budgets. Work with the library media specialists and the districts' central purchasing departments to build an effective library of Appalshop videos while this discounted price rate is in effect."

Appalshop also offers a complete set of all 84 video productions for \$2,940, discounted from the full purchase price of \$13,785. A one- to four-year payment plan is available for collection purchases.

The reduced-price offers are available only to P-12 schools. To place an order or request more information, contact Carolyn Sturgill at Appalshop Marketing and Sales, 91 Madison Ave., Whitesburg, KY 41858; (606) 633-0108; toll free (800) 545-7467; fax (606) 633-1009; e-mail csturgill@appalshop.org.

Scholarship provides incentives for students to make good grades

A new scholarship program enacted by the 1998 General Assembly through Senate Bill 21 provides incentives for students to make good grades and earn money for college while in high school.

The Kentucky Educational Excellence Scholarship (KEES) is administered by the Kentucky Higher Education Assistance Authority, with data collection support from the Kentucky Department of Education. Scholarship eligibility criteria include Kentucky residency; a minimum grade point average of 2.5 at the end of any academic year after July 1, 1998; completion of curriculum requirements set by the Council on Postsecondary Education; and no record of felony convictions.

Award amounts will be based on end-of-year grade point averages and may be adjusted depending on availability of funds. Each eligible student who achieves at least a 15 composite

score on the ACT will also receive a supplemental bonus award based on the student's highest ACT score attained by graduation. KEES awards may be applied to the costs of higher education for a maximum of eight academic terms unless the student is in an official five-year program, in which case the maximum is 10 academic terms. The scholarship must be used within five years of high school graduation (with the exception of officially designated five-year programs).

For information about KEES, visit the Kentucky Higher Education Assistance Authority's Web site at www.kheaa.com. The site includes questions and answers, the text of Senate Bill 21, an SAT/ACT conversion table and the authorized scholarship curriculum. Information is also available from Tim Phelps, KHEAA, 1050 US Highway 127 S, Frankfort, KY 40601-4323; phone (800) 928-8926, ext. 1397; fax (502) 696-7345.

Apply by Oct. 19 to be 'highly skilled educator'

The Department of Education invites dedicated teachers, administrators and other certified staff to apply for designation as highly skilled educators in the state's assistance program for schools.

Approximately 32 individuals will be selected to participate in the program, which places educators in schools that do not meet their goals in the statewide assessment and accountability system. Highly skilled educators act as consultants, working with school staffs to improve teaching and learning.

The selected educators will receive extensive training before and during their two-year participation in the program. Most will serve in schools near their homes, but not in

the districts in which they are employed.

The 1998 General Assembly created the highly skilled educator program to replace the distinguished educator program, which was part of the now-defunct Kentucky Instructional Results Information System.

Program details and an application form are available on the Web at www.murraystate.edu/sbdm/hseprogr.htm or from David Allen at (502) 564-2116. Send e-mailed inquiries to Allen through the KETS global list or to dallen@kde.state.ky.us.

Send completed applications to the Division of School Improvement, 500 Mero St., 6th Floor, Frankfort, KY 40601; fax (502) 564-7820. The deadline is Oct. 19.

Kentucky Education Technology Conference March 4-6, 1999, in Louisville

Details available:
www.kde.state.ky.us/ketc99
(502) 564-7168
lsledge@kde.state.ky.us

Watch for the KETC information/registration brochure in the November issue of *Kentucky Teacher*.

KET

lists skills development programs for October

Kentucky Educational Television has scheduled education professional development programming on these topics during October:

For professional development or leadership credit

- Boosting Achievement in Students at Risk (3 programs)
- Serving Minority Language Students (2 programs)
- Sexual Harassment in the Public Schools (3 programs)

Content courses for teachers

- The Arts: A Content Course for Teachers (premiere; first of four programs)
- Earth Science: A Content Course for Teachers (premiere; first of four programs)

Reading/language arts

- Reading Recovery and Early Literacy (premiere; first of three programs)
- Improving Student Performance in Reading: Remediation Strategies for Intermediate and Middle School
- Teaching High School Writing
- Writing in the Science Classroom

Other professional development programs

- Kentucky Council of Teachers of Mathematics Showcase: Geometry for All
- Building an Inquiry-Based Science Program
- Kentucky Science Teachers Association Showcase
- What is Economics? A New Look for Educators
- We the People: The Citizen and the Constitution
- Library Power IV: A Growth Chart for Change

Individual programs cost \$50 for non-registered schools. Schools and districts can register for KET's entire schedule of 1998-99 professional development programs for a set fee. Schools and districts are advised to call KET for a specific price.

All programs are protected by federal copyright laws, so only those schools and districts that have registered and paid have permission to use them.

For details and registration, phone KET Professional Development at (800) 432-0951.

STLP deadline extended!

The deadline for schools to register new or continuing Student Technology Leadership Programs is now Monday, Nov. 30. This program's mission is to advance individual capabilities, motivate all students and create leadership opportunities through the use of technology.

To be a state-recognized STLP site, apply on the Web at www.kde.state.ky.us/stlp.

Questions? E-mail STLP State Coordinator Elaine Harrison at eharrison@kde.state.ky.us or phone her at (502) 564-7168.

Remember: STLP programs must be registered to receive current information and materials about programs throughout the state — and for students to be eligible to participate in a variety of events at the Kentucky Education Technology Conference in March.

Students can 'travel' to Antarctica with Kentucky biology teacher

Glenn Zwanzig, a biology teacher at DuPont Manual High School in Jefferson County, is one of seven teachers working at the South Pole during October. While in Antarctica, Zwanzig will be studying the role and regulation of chloride cells in Antarctic fish, a study that may lead to the discovery of a better way to regulate high blood pressure in humans.

One part of his participation in the National Science Foundation's Teachers Experiencing Antarctica and the Arctic Program is that students in Kentucky and around the world can commu-

nicate with him via the Internet. Zwanzig's journal will be posted on the Internet at www.glacier.rice.edu/chapters/teatea_zwanzigfrontpage.html. Students also can correspond with Zwanzig through an e-mail link on the Web page, and times for CU-SeeMe interviews about his polar experiences will be posted at the site.

Upon his return from Antarctica in early November, Zwanzig will develop lab activities for the high school curriculum based on his field experience and research in Antarctica.

Challenger Center seeks teachers for 10-month mission

The Challenger Learning Center of Kentucky, scheduled to open in March in Hazard, is seeking innovative master educators to fill two full-time, 10-month positions as mission specialists. The mission specialists will be the center's main instructional staff and will work with students, teachers and the general public. They also will plan and conduct Challenger Learning Center programming, in-

cluding orientations, missions, teacher workshops, VIP flights and special events.

Eligible applicants must have a current teaching certificate (mathematics/science preferred) and at least three years of relevant teaching experience. For information or an application packet, phone Tom Cravens at (800) 334-2793 or (606) 439-5856. The application deadline is Oct. 30.

Watch 'Inside Kentucky Schools'

Second and fourth Saturdays
of every month
Noon ET on KET
5:30 p.m. on KET2

Half-hour video magazine about students,
teachers and programs in Kentucky's public schools

See program information on the Department of Education
Web site : www.kde.state.ky.us.

GIFT grant applications available

Middle and high school teachers may apply for the 1999 Growth Initiatives for Teachers (GIFT) grants sponsored by the GTE Foundation. The GIFT grant program is designed to sustain excellence in mathematics and science teaching, encourage innovative uses of technology in education and provide recognition and new opportunities for outstanding teachers.

Each year, GTE awards GIFT grants to 60 teams, each with one math and one science teacher from the same school who have developed projects

that integrate mathematics, science and technology in innovative ways. Each winning team shares \$7,000 for a school enrichment project and \$5,000 to pursue professional development activities.

The grant application is available at GTE's Website, www.gte.com/g/community/gift.html. The deadline for applications is Jan. 15.

For details, contact Melissa Amour, GTE Foundation, One Stamford Forum, Stamford, CT 06904; (800) 315-5010; gift@gte.com

Talk to us!

Teachers: *Kentucky Teacher* wants to know what you think, what you need from the Department of Education, what you want to see in future issues.



E-mail kyteach@kde.state.ky.us



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(toll free in Kentucky)



Fax (502) 564-6470



Write *Kentucky Teacher*
1914 Capital Plaza Tower
500 Mero St.
Frankfort, KY 40601

Tips can help teachers get homework done

Students can be masters at "explaining" why they can't turn in their homework. While many "reasons" are much more creative than the well-known "The dog ate my homework," they all still point out the fact that some students (and some parents) find little value in homework.

Can teachers help those doubters see the benefits of homework? Yes, say participants in the National Teacher of the Year Program. Their comments and ideas for getting students excited about

homework are in a U.S. Department of Education publication, "Helping Your Students With Homework, A Guide for Teachers," printed last February. Mary Elizabeth Dunn, Kentucky's 1996 Teacher of the Year, is among the educators who provided stories from their classrooms and the following "Tips for Getting Homework Done":

- Lay out expectations early in the school year.
- Create assignments with a purpose.
- Make sure students understand the purpose.
- Make assignments focused and clear.
- Create assignments that challenge students to think and to integrate.
- Vary assignments.
- Give homework that makes learning personal.
- Tie assignments to the present.
- Match assignments to the skills, interests and needs of students.
- Use school and community resources.
- Match assignments to your style of teaching.
- Assign an appropriate amount of homework.
- Encourage and teach good study habits.
- Provide constructive feedback.
- Give praise and motivate.
- Give help as needed.
- Communicate with parents.
- Show respect for students.

The guide can be viewed and downloaded at the U.S. Department of Education's Web site (www.ed.gov/pubs/HelpingStudents). Also available there are resources and Web links to help teachers, students and parents get the most out of homework assignments.



Bulletin Board

Kentucky to host national conference on gifted children

For the first time, the National Association for Gifted Children's annual convention will be held in Kentucky. The association's 45th annual convention is set for Nov. 11-15 at Louisville's Commonwealth Convention Center, Hyatt Regency, the Seelbach Hotel and Galt House.

Classroom teachers, educators, administrators, guidance counselors, parents and others are invited to attend. Session topics will feature differentiated curriculum, ability grouping, technology, gifted children in the regular classroom and more.

A pre-convention Administrator's Day workshop is scheduled for Nov. 11. Beginning at 8:30 a.m., the workshop will feature a videotaped presentation and a roundtable discussion with representatives from state government, school districts, KET, universities, business and industry. School administrators statewide are invited to participate when the workshop is telecast from 9:30 to 10:30 a.m. on KET Star Channel 705.

CONTACT: Rosemarie Gold, 801 Ginger Hall, Morehead State University, Morehead, KY 40351; (606) 783-2840

By Lisa York Gross
Kentucky Department of Education

School councils group schedules conference

The Kentucky Association of School Councils plans to hold its fall conference Oct. 29-31 at the Executive West Hotel in Louisville. "Councils: Making the Connections" will include sessions on assessment, parental engagement, safe schools, budgets, legal issues and other topics of interest to teachers, administrators, school staff, parents and others.

CONTACT: Kentucky Association of School Councils, PO Box 784, Danville, KY 40423-0784; (606) 238-2188; kascouncil@aol.com

Conference will focus on school communications

The Kentucky School Public Relations Association will hold its fall conference Nov. 2-4 at the Bowling Green Plaza Hotel and Conference Center. The event will present professional development sessions designed to help participants improve their schools' ability to communicate important and complex education issues. One special session, "Restoring Confidence in Our Schools," will feature experts in crisis communication and response.

Presenters include some of the most effective education communicators at the state and national levels. The conference is open to educators, school public relations professionals and all others interested in school-community relations. Conference details and registration information are available on the Web at www.livingweb.com/kyspra.

CONTACT: Toni Quire, Kentucky Association of School Administrators, (502) 875-3411; toni@kasa.org

Language arts convention set for February

Mark Feb. 12 and 13, 1999, on your calendar and plan to attend the 63rd annual convention of the Kentucky Council of Teachers of English/Language Arts at the Galt House East in Louisville.

This year's theme is "Kentucky Readers and Writers: A Common Wealth of Literacy." The convention will offer activities for educators from the primary grades through university levels. Local, state, national and international educators will share insights on best practices.

The keynote speaker on Feb. 12 will be Harvey Daniels, author of "Best Practice" and "Methods that Matter." Other featured speakers include author Stephen Tchudi, teacher Jan Cheripco and children's author Evangeline Nicholas. Details are available on the Web at www.kcte.org/conference/conference.html.

CONTACT: Donna Vincent, KCTE/LA president-elect, PO Box 61, Graham, KY 42344; (502) 338-4058; dvincent@mberg.k12.ky.us or donna@mhlon.com

United Nations Day will be Oct. 24

The 1998 United Nations Day is scheduled for Saturday, Oct. 24, at the assembly hall in the Kentucky Capitol in Frankfort. A display of instructional resources and presentations by refugees from Somalia, Haiti and Bosnia will be featured. Douglass W. Cassel Jr., an international authority on human rights, is scheduled to speak.

This program is open to teachers and middle/high school students. Teachers may apply for credit through local professional development coordinators.

CONTACTS: Ken Johnson, govjohns@ACS.EKU.EDU; Delores Nelson, (606) 623-7973, waltdee@ione.net

Kentucky Teacher

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Kentucky Teacher

News for the Nation's Most Innovative Educators

October 1998



Photo by Rick McComb

GETTING THE POINT — Damon Scott answers a question about decimals and place values in mathematics teacher Elizabeth Todd Brown's class at Wheeler Elementary School in Jefferson County. In this issue, Brown and two other award-winning mathematics teachers share their strategies for teaching algebra and geometry to all students.

"This time, we've done it right. Kentucky has developed a testing system that responds to the dreams, wishes and concerns of many teachers, school administrators, students, parents, legislators and testing experts — and even some of the strongest critics of our previous testing system."

Education Commissioner Wilmer S. Cody, on the development of the new Commonwealth Accountability Testing System (See Pages 1 and 2.)

Kentucky Department of Education

Wilmer S. Cody, Commissioner